

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claim 28 is amended. Claims 1-28 are pending.

I. Objection to the Claims

In the Office Action, at page 2, claim 28 was objected to because of informalities. Claim 28 was amended in light of the Examiner's comments, and accordingly, withdrawal of the objection to the claims is respectfully requested.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 2, claims 1, 2, 14, 15 and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,144,375 to Jain et al. in view of U.S. Publication No. 2003/0236912 to Klemets et al. in further view of Halvorsen ("Improving I/O Performance of Multimedia Servers"). This rejection is respectfully traversed because the combination of the teachings of Jain, Klemets and Halvorsen does not suggest:

- analyzing information of streaming media source files, and processing a client's requirements to obtain a splitting requirement of the streaming media source files into clip files;
- defining a split files placement strategy and analyzing a clip file allocating requirements, according to the client's requirements;
- analyzing the streaming media source files to construct a splitting task list and relevant control files, according to the client's requirements;
- creating several threads to split the streaming media source files, wherein each thread is responsible for splitting a streaming media source file; and
- distributing the clip files to relevant storage server nodes, according to the split files placement strategy,

as recited in independent claims 1 and 14.

Further, Jain does not discuss or suggest:

- capturing information of the streaming media source files;
- capturing client's requests information;
- creating data placement strategies;
- analyzing the streaming media source files and creating task lists;

splitting the streaming media source files into clips; and
transmitting and storing the clips in the servers,
as recited in independent claim 27.

Jain discusses a multi-perspective viewer for content-based interactivity in which a content-based event timeline which graphically depicts multi-media events. When a user selects an event by selecting an event representation from the timeline, the viewer displays all of the multi-media information that is associated with the selected event. The viewer can display a "highlight reel" (video clip).

The Examiner alleges that Jain discloses "a structure of a clip file," "splitting video streams into clips" and "strategically storing video clips," but does not allege that Jain discloses any other elements of independent claim 1, for example.

First, Jain does not discuss or suggest defining a structure of a clip file, but merely discusses that a video clip may be created from a multi-media program. Jain does not discuss defining the structure of such a clip file.

Second, independent claims 1, 14 and 27 do not recite "strategically storing video clips". In particular, for example, claim 1 recites "distributing the clip files to relevant storage server nodes, according to the split files placement strategy." Jain does not discuss or suggest that clip files are distributed to relevant storage server nodes. Jain additionally does not discuss or suggest that the clip files are distributed according to a split files placement strategy. Jain discusses only that multi-media objects and events are stored in a relational object-oriented multi-media database, but Jain fails to particularly discuss that clip files are distributed to server nodes in accordance with a split files placement strategy.

Further, Jain does not discuss or suggest the remaining features of independent claims 1 and 14, for example. The Examiner concedes that Jain does not suggest "a control file, analyzing video streams, or constructing a splitting task list," but indicates that Klemets makes up for the deficiencies in Jain, alleging that "[i]t would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a system comprising a control file, is capable of analyzing vide streams, and constructing a task list as taught by Klemets et al. with a system that defines the structure of a clip files, splits video streams into video clips, and strategically stores said video clips as taught by Jain et al. for the purpose of multimedia data splitting." The Applicants respectfully disagree.

First, the motivation cited of "for the purpose of multimedia data splitting" is not a motivation that is enough to suggest to one of ordinary skill in the art to combine the teachings of

Jain and Klemets. In particular, multimedia data splitting is the general field of the present invention, but it is not a motivation that is suggestive of combining the references. Further, multimedia data splitting is the purpose or result which is wished to be achieved, but "multimedia data splitting" is not a motivation or reason to combine references. There must be an apparent reason to combine the known elements in the fashion claimed by the patent at issue. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. __ (2007). Thus, the reason or motivation to combine the known elements must be apparent. In this case, in order to multimedia data split is not an apparent reason to combine the elements of Jain and Klemets.

In addition, Klemets does not make up for the deficiencies in Jain. Klemets discusses a system and method for embedding a streaming media format header within a session description message, the header describing relationships between available media streams. A method streams content encoded in a streaming media format to at least one client as one or more media streams via a streaming protocol. The streaming media format has a header including one or more stream identifiers, which correspond to at least one of the media streams. The method includes receiving a description request from the client to describe the content and includes transmitting a description message to the client in response to the received description request.

The Examiner alleges that Klemets discloses "a control file consisting of an index and a session description protocol," "analyzing information of streaming media source files," and "a program module capable of including tasks," but does not allege that Klemets discloses any other elements of independent claim 1, for example.

First, Klemets does not discuss or suggest defining a structure of a distributed control file. Klemets discuss only a format file, but does not discuss defining a structure of the format file. In contrast, the present invention of claim 1 defines the control file by retrieving, for example, playing length serial number, needed bandwidth, etc. Klemets does not define the format file.

Second, Klemets does not discuss or suggest analyzing information of streaming media source files. Klemets discusses that a description request to describe the content is received from a client, and in response to the description request, transmitting a description message via a description protocol to the client in response to the received description request. However, transmitting description message in response to a description request is not analyzing information of streaming media source files.

Further, Klemets does not discuss or suggest that streaming media source files are analyzed to construct a splitting task list and relevant control files, according to the client's requirements. While Klemets does discuss that program modules may include tasks, Klemets is entirely silent as to constructing a splitting task list after analyzing media source files. Klemets also does not suggest that the task list is split in accordance with a client's requirement.

The Examiner fails to discuss, and Klemets does not disclose, the other elements of the independent claims, for example, claim 1. Further, while independent claim 27 does discuss tasks, independent claim 27 specifically recites "analyzing the streaming media source files and creating task lists." Klemets does not suggest that task lists are created.

The Examiner concedes that Jain as modified by Klemets does not disclose "defining the structure of a network packets, processing the requirements of a client, defining split files, or thread creation," but indicates that Halvorsen makes up for the deficiencies in Jain and Klemets. The Examiner alleges that Halvorsen discloses "defining a structure of a network packet," "client systems having requirements," "defining split files,...placement strategy, and analyzing a clip file allocating requirements...according to the split files placement strategy," and "creating several threads to carry out successive tasks," and that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a system capable of defining the structure of a network packet, processing the requirements of a client, defining split files, and thread creation as taught by Halvosen with a system comprising multimedia data splitting as taught by Jain et al., as modified by Klemets et al., for the purpose of video splitting and distributed placement." The Applicants respectfully disagree.

First, the motivation cited of "for the purpose of video splitting and distributed placement" is not an apparent reason or motivation to combine references. That the result is video splitting and distributed placement is irrelevant in establishing a *prima facie* case of obviousness. The Examiner is required to present a motivation that would enable one of ordinary skill in the art to combine references. The result of video splitting and distributed placement provides no apparent reason or motivation to one of ordinary skill in the art to suggest combining Jain, Klemets and Halvorsen, particularly as video splitting is the general field of technology of the references. Further, "distributed placement" is also not a motivation or reason to combine references. Additionally, in accordance with M.P.E.P. § 2142, the teaching or suggestion to make the claimed combination must be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Claim 1 states that the clip files are distributed according to a placement strategy. Thus, distributed placement is

exactly that which was disclosed by the present invention, and therefore cannot be used by the Examiner in establishing a *prima facie* case of obviousness.

As to the reference, Halvorsen discusses an architecture for Media on Demand servers that maximize the number of concurrent clients a single server can support.

Halvorsen discusses that one can make observations about packets, but Halvorsen does not disclose defining the structure of the packet.

Further, while Halvorsen does discuss that clients require their own set of system resources, Halvorsen does not discuss or suggest that a client's requirements are processed to obtain a splitting requirement of streaming media source files. That clients require their own set of resources is not processing a client's requirements to obtain a splitting requirement or to construct a splitting task list. Also, Halvorsen is silent as to capturing client's requests information.

In addition, while Halvorsen does discuss that headers and media data are split into two files, Halvorsen does not discuss or suggest obtaining a splitting requirement of the streaming media source files into clip files, and Halvorsen does not discuss defining a split files placement strategy. Halvorsen discusses that each clip can be assigned a retrieval period where several clients can start at the beginning of each period to view the same movie and to share resources. However, Halvorsen does not suggest that a split files placement strategy is defined or that a clip file allocating requirements is analyzed according to the client's requirements.

Also, while Halvorsen does discuss that clients have different hardware characteristics, Halvorsen does not discuss that a clip file allocating requirements is analyzed in accordance with the client's requirements.

Additionally, Halvorsen discusses scheduling of threads, but Halvorsen is completely silent as to creating several threads to split the streaming media source files, where each thread is responsible for splitting a streaming media source file.

Further, Halvorsen and the Examiner do not discuss "obtaining a splitting requirement," "analyzing the streaming media source files to construct a splitting task list and relevant control files, according to the client's requirements," and does not discuss or suggest "distributing the clip files to relevant storage server nodes, according to the split files placement strategy," as recited in independent claim 1. Also, Halvorsen does not discuss "creating data placement strategies" and "creating task lists".

Therefore, as the combination of the teachings of Jain, Klemets and Halvorsen does not suggest “analyzing information of streaming media source files, and processing a client's requirements to obtain a splitting requirement of the streaming media source files into clip files; defining a split files placement strategy and analyzing a clip file allocating requirements, according to the client's requirements; analyzing the streaming media source files to construct a splitting task list and relevant control files, according to the client's requirements; creating several threads to split the streaming media source files, wherein each thread is responsible for splitting a streaming media source file; and distributing the clip files to relevant storage server nodes, according to the split files placement strategy,” as recited in independent claims 1 and 14, as the combination of the teachings of Jain, Klemets and Halvorsen does not suggest “capturing information of the streaming media source files; capturing client's requests information; creating data placement strategies; analyzing the streaming media source files and creating task lists; splitting the streaming media source files into clips; and transmitting and storing the clips in the servers,” as recited in independent claim 27, and as the motivations cited are inadequate to suggest combining the references, and not adequate motivations, claims 1, 14 and 27 patentably distinguish over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

Claims 2 and 15 depend directly from independent claims 1 and 14 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 2 recites that “the streaming media source files include an Index file and a Session Description Protocol (SDP) file.” Therefore, claims 2 and 15 patentably distinguish over the references relied upon for at least the reasons discussed above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

In the Office Action, at pages 10-26, claims 3-13 and 16-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Jain, Klemets, Halvorsen Jin et al. (“Owl: A New Multimedia Data Splitting Scheme for Cluster Video Server”), U.S. Patent No. 6,704,790 to Gopalakrishnan et al., U.S. Patent No. 5,884,028 to Kindell et al., U.S. Patent No. 6,573,907 to Madrane, U.S. Patent No. 6,675,189 to Rehg et al., U.S. Patent No. 6,591,247 to Stern, U.S. Patent No. 6,305,019 to Dyer et al., U.S. Publication No. 2002\0069420 to Russell et al., U.S. Patent No. 6,782,550, to Cao, and U.S. Publication No. 2003\0118059 to Sugahara et al . This rejection is respectfully traversed.

As discussed above, the combination of the teachings of Jain, Klemets and Halvorsen does not suggest all the features of independent claims 1 and 14. Jin, Gopalakrishnan, Kindell, Madrane, Rehg, Stern, Dyer, Russell, Cao, and Sugahara fail to make up for the deficiencies in Jain, Klemets and Halvorsen. Therefore, claims 1, 14 and 27 patentably distinguish over the references relied upon. Claims 3-13 and 16-26 depend either directly or indirectly from independent claims 1 and 14 and include all the features of their respective independent claims. For example, claim 6 recites that "the analyzing of the streaming media source files includes, analyzing a number of logical time units in the media source files, and obtaining time information of a header and a number of media stream for each logic time unit." Therefore, claims 3-13 and 16-26 patentably distinguish over the references relied upon for at least the reasons discussed above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

In the Office Action, at page 28, claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Jain in view U.S. Patent No. 7,143,177 to Johnson et al. This rejection is respectfully traversed because the combination of the teachings of Jain and Johnson does not suggest:

simultaneously distributing allocating schemes setting splintered video slices to different server nodes of clustered video servers, utilizing parallel processing characteristics,

as recited in independent claim 28.

The Examiner alleges that Jain discloses splitting streaming media source files, but concedes that Jain does not discuss or suggest a method of simultaneously distributing allocating schemes setting splintered video slices to different server nodes of clustered video servers, utilizing parallel processing characteristics. The Examiner indicates that Johnson makes up for the deficiencies in Jain. The Applicants respectfully disagree.

First, while Jain does discuss media source splitting, Jain does not discuss or suggest any of the elements or portions of elements of independent claim 28. Johnson fails to make up for the deficiencies in Jain.

Johnson discusses a presentation system for synchronizing performance of a plurality of presentation content portions at a network node, where, when two such content portions are to be presented concurrently at the network nodes, at least one is delayed until the other such portion can be presented concurrently therewith. Johnson also discusses that a presentation can be concurrently presented with content provided in languages specific to the audience members.

Johnson does not, however, discuss or suggest that allocating schemes that set splintered video slices to different server nodes are distributed simultaneously using parallel processing characteristics. Johnson does not discuss allocating schemes or simultaneously distributing the allocating schemes that set the splintered video slices to different server nodes. Further, Johnson includes no discussion of a simultaneous distribution of these schemes utilizing parallel processing characteristics.

In addition, the "motivation" provided of "for the purpose of audiovisual rendering" is, first, a result and not a motivation or reason to combine references, and second, does not suggest how one of ordinary skill in the art would have been led to combine the teachings of Jain's multi-perspective viewer for content-based interactivity with Johnson's presentation system to teach the features of independent claim 28.

Therefore, as the combination of the teachings of Jain and Johnson does not suggest "simultaneously distributing allocating schemes setting splintered video slices to different server nodes of clustered video servers, utilizing parallel processing characteristics," as recited in independent claim 28, and as the motivation cited is inadequate to suggest such a combination, claim 28 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the §103(a) rejection is respectfully requested

Conclusion

In accordance with the foregoing, claim 28 has been amended. Claims 1-28 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: November 23, 2007

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